

REL Southwest Ask A REL Response

June 2020

Question:

What are approaches for school recovery following a natural disaster with respect to school reopening and supporting students' social and emotional needs?

Response:

Thank you for the question you submitted to our REL Reference Desk. We have prepared the following memo with research references to help answer your question. For each reference, we provide an abstract, excerpt, or summary written by the study's author or publisher. Following an established Regional Educational Laboratory (REL) Southwest research protocol, we conducted a search for research on approaches for school recovery and supporting students' social emotional needs following a natural disaster.

We have not evaluated the quality of references and the resources provided in this response. We offer them only for your reference. Also, we searched the references in the response from the most commonly used resources of research, but they are not comprehensive, and other relevant references and resources may exist. References provided are listed in alphabetical order, not necessarily in order of relevance. We do not include sources that are not freely available to the requestor.

Research References

Marbley, A. F. (2007). In the wake of Hurricane Katrina: Delivering crisis mental health services to host communities. *Multicultural Education*, 15(2), 17–23.

<https://eric.ed.gov/?id=EJ784855>

From the ERIC abstract: “Throughout the country and especially in Texas, local communities opened their arms to hurricane Katrina evacuees. Like the federal government, emergency health and mental health entities were unprepared for the massive numbers of people needing assistance. Mental health professionals, though armed with a wealth of crisis intervention information, weren't equipped with skills for either anticipating or assessing the effects of the relocation of evacuees into local communities on the mental health of the humanitarian host communities. Yet, the response to the disaster was as unprecedented as the widespread devastation of the hurricane. Likewise, the generosity of people was unprecedented; individuals, the media,

celebrities, businessmen, states, cities, towns, the international world, community organizations, faith-based institutions, public schools, colleges and universities all rallied around rescuing the refugees. Yet, despite good intentions and in spite of the massive efforts to get people to safety with food, water, and crisis intervention counseling, communities were stressed and strained. In Texas, government officials and local governments needed money to provide basic health and mental-health care for evacuees, but also accommodations for the new students placed in Texas' schools. As a consequence of the rapid depletion of the state's resources, responding to the disaster took its toll on Texas and Texas communities. For Katrina victims and the people and communities responding to the disaster, the psychological implications are yet unknown, but are guaranteed to be tremendous, now and in the months and years to come. Therefore, incorporating mental health services for individuals and communities that address race, class, and culture is a critical component of comprehensive crisis mental health services to the evacuees, their families, and the communities that housed them. This article introduces a crisis mental health service delivery model for addressing the devastating effects of disasters, like Katrina, on communities, specifically humanitarian host communities, a model that address inherent cultural issues."

McIntosh, T. (2019). Natural disaster. *European Journal of Educational Sciences, Special Edition*(1), 67–75. <https://eric.ed.gov/?id=EJ1236998>

From the ERIC abstract: "This article presents the natural disaster and how it affects children over the world. When there is a natural disaster occurring such as hurricanes, tornadoes, flooding, it can affect not only the family but the children as well. The children are often left to relocate, live with other family members, or separated from their parents. Natural disasters can lead to externalize behaviors with kids. The Journey of Hope, a school-based group work intervention for children and early adolescents who have experienced a collective trauma such as a natural disaster can assist kids with externalizing behaviors. Through the use of group work interventions such as group problem solving and experiential and reflective learning, children and early adolescent work toward improving protective factors to assist them in their recovery."

Osofsky, J., Kronenberg, M., Bocknek, E., & Hansel, T. C. (2015). Longitudinal impact of attachment-related risk and exposure to trauma among young children after Hurricane Katrina. *Child & Youth Care Forum*, 44(4), 493–510. <https://eric.ed.gov/?id=EJ1068568>. Retrieved from <https://www.iaem.org/portals/25/documents/Longitudinal-Impact-of-Attachment-Related-Risk-After-Katrina-2015.pdf>

From the ERIC abstract: "Background: Research suggests that young childhood is a dynamic developmental phase during which risks to attachment figures as well as traumatic events may be particularly important. The loss and disruption associated with Hurricane Katrina highlighted the vulnerabilities and special needs of young children exposed to natural disaster. Objective: The current study explored ways in which multiple stressors associated with Hurricane Katrina contributed to adverse outcomes. We hypothesize overall decreases in trauma symptoms over time. We further hypothesize that increased attachment and hurricane related risk factors will negatively influence longitudinal symptom patterns. Methods: Data was collected from families of preschool-

aged children (ages 3-5) during the school year following Hurricane Katrina (2005-2006) and each subsequent school year (2006-2007, 2007-2008, and 2008-2009). Latent growth curve modeling was used to assess trauma symptoms overtime and the effect of risk indices on these trauma symptoms. Results: Results suggest an overall decrease in trauma distress symptoms over time and further indicate that attachment and trauma related risks of caregiver disruption, other non-human losses, trauma prior to and subsequent to the storm, as well as Katrina exposure are significant predictors of symptoms over time. Conclusions: Given the rapid physical, cognitive, and emotional development that occurs in early childhood, these findings support the importance of providing intervention with preschool age children post-disaster. Further, the findings also suggest that a relationship based treatment including both caregiver and child is most likely to be effective.”

- Pang, V. O., Madueno, M., Atlas, M., Stratton, T., Oliger, J., & Page, C. (2008). Addressing student trauma in the wake of the California wildfires. *Social Education*, 72(1), 18–23. <https://eric.ed.gov/?id=EJ784390>. Retrieved from <https://www.socialstudies.org/publications/socialeducation/january-february2008/addressing-student-trauma-in-the-wake-of-california-wildfires>

From the ERIC abstract: “Presidents George W. Bush and Bill Clinton declared natural disasters somewhere in the United States on average of about one per week between 1998 and 2005. Despite this frequency, most citizens are unprepared when a natural disaster occurs in their city or neighborhood. In particular, teachers and students can become paralyzed by the overwhelming destruction and emotional trauma brought on by these disasters. This article aims to assist teachers in addressing the multiple levels and forms of student trauma that may result from natural disasters such as Hurricane Katrina in Louisiana or tornadoes in Kansas; in particular, the effects of the wildfires in California during the fall of 2007. Evaluations of the challenges and responses of schools, accompanied by suggestions for activities that can encourage community service and critical thinking by students, are the focus of this article.”

- Powell, T. M., & Bui, T. (2016). Supporting social and emotional skills after a disaster: Findings from a mixed methods study. *School Mental Health*, 8(1), 106–119. <https://eric.ed.gov/?id=EJ1229107>. Retrieved from <https://traumaticstressinstitute.org/wp-content/uploads/2016/03/Powell-Bui.pdf?32c611&32c611>

From the ERIC abstract: “Disasters can affect a youth’s physical and emotional well-being. They disrupt everyday life by displacing individuals and families, destroying homes, and splintering communities (Gewirtz et al. in *J Marital Fam Ther* 34(2):177–192, 2008; La Greca and Silverman in *Child Dev Perspect* 3(1):4-10, 2009). School-based interventions are one approach to mitigate emotional distress in youth who have experienced a disaster, as schools are one of the most common venues for youth to receive mental health services (Greenberg et al. in *Am Psychol* 58:466-474, 2003). This paper explores the impact of a school-based psychosocial curriculum entitled Journey of Hope (JoH). This eight-session intervention attempts to reduce the impact of a disaster by enhancing protective factors such as social support, coping, and psycho-education. The evaluation study was conducted in the 2014-2015 school year after an EF5 tornado struck

Moore, Oklahoma. As a result of the tornado, 24 people were killed, 377 injured, and two schools were destroyed (National Weather Service Weather Forecast Office, 2014). This mixed methods study employed quantitative and qualitative measures to examine the impact of the JoH intervention. Quantitative measures examined coping, general self-efficacy, prosocial behaviors, and overall distress. Qualitative data were obtained through interviews with $N = 16$ students after participation in the JoH. Semi-structured interview guides were used to determine what children learned, liked, and felt was beneficial from taking part in the JoH. A two-way repeated-measures ANOVA was used to assess the differences between the experimental and control group at baseline and posttest. Results indicated a significant increase in positive coping skills including communication and tension management and prosocial behaviors from baseline to posttest for the Journey of Hope group. No significant differences were found on self-efficacy or overall distress. Content analysis was conducted to determine qualitative results. Themes that emerged from the qualitative interviews suggested participation in the Journey of Hope enhanced peer relationships and helped participants identify how to manage emotions such as anger, anxiety, and grief. Findings from this evaluation study suggest that participation in a broadly accessible psycho-educational program may help children cope with traumatic events such as a natural disaster. Further research should be conducted to assess whether the Journey of Hope is transferrable across disaster contexts.”

Powell, T., & Thompson, S. J. (2016). Enhancing coping and supporting protective factors after a disaster: Findings from a quasi-experimental study. *Research on Social Work Practice*, 26(5), 539–549. <https://eric.ed.gov/?id=EJ1109731> Retrieved from <https://www.researchgate.net/publication/269102262>

From the ERIC abstract: “Objective: This article presents the Journey of Hope (JoH), a school-based intervention for children who have experienced a collective trauma such as a natural disaster. Through the use of group work, the JoH focuses on building coping skills and enhancing protective factors to help children recover. Method: This quasi-experimental research included 102 children impacted by tornadoes in Tuscaloosa, Alabama in 2011. Results: Through an hierarchical linear model analysis with ($n = 48$) from the JoH group and ($n = 54$) from a wait-list control group, the outcomes indicate that after participation in the JoH youth had increased coping skills, $F(100) = 5.270$, $p < 0.05$, and prosocial behaviors, $F(95) = 4.286$, $p < 0.05$. This is the first quasi-experimental design to be conducted on the JoH; findings provide preliminary evidence of the effectiveness of this broad-based postdisaster intervention. Conclusion: Future replication studies with larger samples in other societies impacted by a natural disaster are needed to further evaluate the JoH’s impact in enhancing coping and building resilience.”

Rush, S. C., Wheeler, J., & Partridge, A. (2014). A proposed template for an emergency online school professional training curriculum. *Contemporary School Psychology*, 18(2), 143–156. <https://eric.ed.gov/?id=EJ1040594>. Retrieved from <https://link.springer.com/content/pdf/10.1007/s40688-014-0015-9.pdf>

From the ERIC abstract: “On average, natural disasters directly impact approximately 160 million individuals and cause 90,000 deaths each year. As natural disasters are

becoming more familiar, it stands to reason that school personnel, particularly mental health professionals, need to know how to prepare for natural disasters. Current disaster preparation and response models used by mental health professionals in K-12 schools, however, assume physical access to schools immediately or shortly after a disaster, and do not adequately address total or near total destruction of school and community property that would preclude any form of school operations or access for extended periods of time. One means for maintaining school operations after a natural disaster makes school operation and/or access impossible for an extended period of time is to employ an emergency online school plan. Ideally, emergency online schools can offer schooling and support services after a natural disaster incapacitates physical school structures for an extended period of time. This article presents the rationale and general resources necessary for constructing and operating emergency online schools and proposes a template for a graduate-level training curriculum on developing emergency online school plans for school systems.”

Strait, J., & Jones, J. (2009). Each one, teach one: A methodological approach for national disaster school response. *International Journal on School Disaffection*, 6(2), 9–20. <https://eric.ed.gov/?id=EJ853211>

From the ERIC abstract: “Hamline University, a medium sized college in St. Paul Minnesota, dedicated resources and time to New Orleans, Louisiana in its efforts to rebuild and reclaim the city. Days after Hurricane Katrina hit, Hamline sent students, faculty and staff to help with recovery efforts. The Education Club adopted Martin Luther King Science and Technology school (MLK) soon after to help in cleaning and rebuilding the school and sent over \$20,000.00 in books, supplies, merchandise gift cards, food and water to help with this effort. Still fueled by the great need in New Orleans for assistance, the group's leader Dr. Jean Strait worked with Traveler's Insurance Company and received a grant of \$30,000 to start an online tutoring and mentoring program that would be staffed by Hamline University and Avalon High School students in St. Paul. This article talks about a program called ‘Each One, Teach One,’ which grew out of a Hurricane Katrina rebuilding project. The goal of the program is to create a national disaster-related education response model that could be replicated in any city in the U.S. The program consists of a joint on-line service-learning tutoring/mentoring program between Hamline University, Avalon High School and grade five through nine New Orleans students. Hamline Students serve as tutors/mentors to both the Avalon High School students and the grade five through nine students. Hamline students and Avalon students are paired together to lead pods or groups of New Orleans students as a team. The authors discuss the process for creating the program, as well as the preparations and limitations faced in implementing the program.”

Wahl-Alexander, Z. (2015). Practitioners’ experiences creating and implementing an emotional recovery and physical activity program following a natural disaster. *Strategies: A Journal for Physical and Sport Educators*, 28(2), 17–20. <https://eric.ed.gov/?id=EJ1053217>. Retrieved from: <https://www.researchgate.net/publication/274312159>

From the ERIC abstract: “On April 27, 2011 a series of tornadoes tore through the southeast United States. Sixty-four percent of the counties in the state of Alabama were

directly affected by these storms. After a natural disaster, children who are directly or indirectly affected show numerous intense emotional reactions. Recovery programs can be set up to enable them to combat these reactions, and decrease stress. At the University of Alabama, the goals of a recovery program were to reduce students' anxiety and stress levels, offer students developmentally appropriate physical activity, allow students the opportunity to share their experiences, and provide students with methods to cope with the traumatic event. The recovery program encompassed both somatic and physiological stress-reducing techniques in addition to art therapy and group sharing sessions. The purpose of this article is to describe how the recovery program was created, share the challenges that were faced, and explicate the experiences from the program.”

Warbington, N., Owenby, K., Brady, H., Shears, D. B., Burton, J., & Strong, K. (2019). School counselors help build resilience after natural disaster. *European Journal of Educational Sciences, Special Edition*(1), 57–66. <https://eric.ed.gov/?id=EJ1236721>.

From the ERIC abstract: “Natural disasters affect large numbers of children and youth in communities around the world. Unlike other crises, natural disasters impact entire communities, including the students and educators alike. These critical situations cause physical, emotional, academic, and psychological issues for those impacted. Educators, especially school counselors, often become a source of support for students and families. Providing support to students after a natural disaster is one protective factor that school counselors can provide that can help the students build resilience. Interviews were conducted to explore the lived experiences of school counselors who had experienced a natural disaster in their community and/or school. A dozen school counselors were contacted via email asking for their participation. Seven counselors participated in the interview. The school counselors interviewed all believed that experiencing the disaster with their students helped them provide more meaningful aftercare and all experienced some level of vicarious trauma or stress. All seven interviewees believed their personal experience of the natural disaster helped them to provide support to their students in a more empathic way.”

Methods

Keywords and Search Strings

The following keywords and search strings were used to search the reference databases and other sources:

- (“Natural Disasters”) AND (“school reopening” OR “school recovery”) AND (“Academic Recovery” OR “Emergency Programs” OR “Crisis Management” OR “Crisis Intervention” OR “Coping” OR “Resilience” OR “Emotional Response” OR “Trauma” OR “Social Development” OR “Emotional Development” OR “Emotional Response” OR “Mental Health” OR “Intervention” OR “student achievement” OR “transportation”)

- (“Natural Disasters”) AND (school) AND (“Academic Recovery” OR “Reopening” OR “Emergency Programs” OR “Crisis Management” OR “Crisis Intervention” OR “Coping” OR “Resilience” OR “Emotional Response” OR “Trauma” OR “Social Development” OR “Emotional Development” OR “Emotional Response” OR “Mental Health” OR “Intervention” OR “student achievement” OR “transportation”)

Databases and Resources

We searched [ERIC](#) for relevant, peer-reviewed research references. ERIC is a free online library of more than 1.8 million citations of education research sponsored by the Institute of Education Sciences (IES). Additionally, we searched the [What Works Clearinghouse](#).

Reference Search and Selection Criteria

When we were searching and reviewing resources, we considered the following criteria:

- *Date of the publication:* References and resources published from 2005 to present, were included in the search and review.
- *Search priorities of reference sources:* Search priority is given to study reports, briefs, and other documents that are published and/or reviewed by IES and other federal or federally funded organizations, academic databases, including ERIC, EBSCO databases, JSTOR database, PsychInfo, PsychArticle, and Google Scholar.
- *Methodology:* The following methodological priorities/considerations were given in the review and selection of the references: (a) study types—randomized control trials, quasi-experiments, correlational studies, descriptive data analyses, literature reviews, mixed methods analyses, and so forth; (b) target population, samples (representativeness of the target population, sample size, volunteered or randomly selected, and so forth), study duration, and so forth; and (c) limitations, generalizability of the findings and conclusions, and so forth.

This memorandum is one in a series of quick-turnaround responses to specific questions posed by stakeholders in the Southwest Region (Arkansas, Louisiana, New Mexico, Oklahoma, and Texas), which is served by the Regional Educational Laboratory (REL) Southwest at AIR. This memorandum was prepared by REL Southwest under a contract with the U.S. Department of Education’s Institute of Education Sciences (IES), Contract ED-IES-91990018C0002, administered by AIR. Its content does not necessarily reflect the views or policies of IES or the U.S. Department of Education nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.